IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of
JACOTOT ET AL.
Serial No. 10/573,576
Filed: March 24, 2006

Atty Dkt. BJS-1721-112
C# M#
TC/A.U. 1617
Examiner: Unassigned
Date: Monday, July 16, 2007

Title: PEPTIDES HAVING, FOR EXAMPLE, ANTIANGIOGENIC ACTIVITY AND APPLICATIONS THEREOF IN THERAPEUTICS

Attached:
(1) Notification of Defective Response dated June 14, 2007
(2) "Computer Readable Form (CRF) for Sequence Listing – Defective" dated July 6, 2007;
(3) Amendment; and
(4) paper & CRF of Sequence Listing

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE/AMENDMENT/LETTER

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

☐ **Correspondence Address Indication Form Attached.**

Fees are attached as calculated below:

Total effective claims after amendment **0** previously paid for **20** (at least 20) =	0 x $50.00	$0.00 (1202)/$0.00 (2202)	$
Independent claims after amendment **0** previously paid for **3** (at least 3) =	0 x $200.00	$0.00 (1201)/$0.00 (2201)	$
If proper multiple dependent claims now added for first time, (ignore improper); add		$360.00 (1203)/$0.00 (2203)	$
Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s)		One Month Extension $120.00 (1251)/$0.00 (2251) Two Month Extensions $450.00 (1252)/$0.00 (2252) Three Month Extensions $1020.00 (1253/$0.00 (2253) Four Month Extensions $1590.00 (1254/$0.00 (2254) Five Month Extensions $2160.00 (1255/$1080.00 (2255)	$
Terminal disclaimer enclosed, add		$130.00 (1814)/ $0.00 (2814)	$

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee	$180.00 (1806)	$	0.00
Assignment Recording Fee	$40.00 (8021)	$	0.00
Other:		$	**0.00**
	TOTAL FEE	$	**0.00**

☐ **CREDIT CARD PAYMENT FORM ATTACHED.**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

901 North Glebe Road, 11th Floor
Arlington, Virginia 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100
BJS:

NIXON & VANDERHYE P.C.
By Atty: B. J. Sadoff, Reg. No. 36,663

Signature: /B. J. Sadoff/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/573,576	Etienne Jacotot	BJS-1721-112

INTERNATIONAL APPLICATION NO.		
PCT/FR04/02422		
I.A. FILING DATE	PRIORITY DATE	
09/24/2004	09/25/2003	

23117
NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

CONFIRMATION NO. 5093

371 FORMALITIES LETTER

OC000000024354640

Date Mailed: 06/14/2007

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495)

- Priority Document
- Copy of the International Application filed on 03/24/2006
- English Translation of the IA filed on 06/05/2006
- Copy of the International Search Report filed on 03/24/2006
- Preliminary Amendments filed on 03/24/2006
- Information Disclosure Statements filed on 03/24/2006
- Oath or Declaration filed on 03/24/2006
- Request for Immediate Examination filed on 03/24/2006
- U.S. Basic National Fees filed on 03/24/2006
- Assignment filed on 06/05/2006
- Priority Documents filed on 06/05/2006
- Power of Attorney filed on 03/24/2006
- Non-English Language Application filed on 03/24/2006
- Specification filed on 03/24/2006
- Claims filed on 03/24/2006
- Abstracts filed on 03/24/2006
- Drawings filed on 03/24/2006
- Paper nucleotide sequence listings filed on 03/24/2006

Applicant's response filed 06/05/2006 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/25/2006 have not been completed.

- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer

readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.** Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825 (d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821 (e) may be submitted in lieu of a new CRF.

- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- **For Rules Interpretation, call (571) 272-0951**
- **For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.**
- **Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov**

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

PAULETTE R KIDWELL

Telephone: (703) 308-9140 EXT 216

PART 2 - OFFICE COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/573,576	PCT/FR04/02422	BJS-1721-112

FORM PCT/DO/EO/916 (371 Formalities Notice)

==========

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: Fri Jul 06 13:30:21 EDT 2007

==========

****

Reviewer Comments:

For SEQ ID # 1 and 11, a Xaa can only represent a single amino acid, not a group of amino acids or a motif. Many of the SEQ ID numbers have incomplete features with nothing provided in the <223> numeric identifier. The numbering of the amino acids, in all of the sequences, is not aligned properly.

****

Validated By CRFValidator v 1.0.2

Application No: 10573576 Version No: 1.0

Input Set:

Output Set:

Started: 2007-07-05 13:02:56.585
Finished: 2007-07-05 13:03:00.275
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 690 ms
Total Warnings: 55
Total Errors: 37
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code		Error Description
W	333	tabs used in amino acid numbering SEQID (1)
W	333	tabs used in amino acid numbering SEQID (1)
E	257	Invalid sequence data feature in <221> in SEQ ID (2)
E	201	Mandatory field data missing in <223> in SEQ ID (2)
W	333	tabs used in amino acid numbering SEQID (2)
W	333	tabs used in amino acid numbering SEQID (2)
E	257	Invalid sequence data feature in <221> in SEQ ID (3)
E	201	Mandatory field data missing in <223> in SEQ ID (3)
W	333	tabs used in amino acid numbering SEQID (3)
W	333	tabs used in amino acid numbering SEQID (3)
E	257	Invalid sequence data feature in <221> in SEQ ID (4)
E	201	Mandatory field data missing in <223> in SEQ ID (4)
W	333	tabs used in amino acid numbering SEQID (4)
W	333	tabs used in amino acid numbering SEQID (4)
E	257	Invalid sequence data feature in <221> in SEQ ID (5)
E	201	Mandatory field data missing in <223> in SEQ ID (5)
W	333	tabs used in amino acid numbering SEQID (5)
W	333	tabs used in amino acid numbering SEQID (5)
E	257	Invalid sequence data feature in <221> in SEQ ID (6)
E	201	Mandatory field data missing in <223> in SEQ ID (6)

Input Set:

Output Set:

Started: 2007-07-05 13:02:56.585
Finished: 2007-07-05 13:03:00.275
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 690 ms
Total Warnings: 55
Total Errors: 37
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code		Error Description
W	333	tabs used in amino acid numbering SEQID (6)
W	333	tabs used in amino acid numbering SEQID (6)
E	257	Invalid sequence data feature in <221> in SEQ ID (7)
E	201	Mandatory field data missing in <223> in SEQ ID (7)
W	333	tabs used in amino acid numbering SEQID (7)
W	333	tabs used in amino acid numbering SEQID (7)
E	257	Invalid sequence data feature in <221> in SEQ ID (8)
E	201	Mandatory field data missing in <223> in SEQ ID (8)
W	333	tabs used in amino acid numbering SEQID (8)
W	333	tabs used in amino acid numbering SEQID (8)
E	257	Invalid sequence data feature in <221> in SEQ ID (9)
E	201	Mandatory field data missing in <223> in SEQ ID (9)
W	333	tabs used in amino acid numbering SEQID (9)
W	333	tabs used in amino acid numbering SEQID (9)
E	257	Invalid sequence data feature in <221> in SEQ ID (10)
E	201	Mandatory field data missing in <223> in SEQ ID (10)
W	333	tabs used in amino acid numbering SEQID (10)
W	333	tabs used in amino acid numbering SEQID (10) This error has occured more than 20 times, will not be displayed
E	257	Invalid sequence data feature in <221> in SEQ ID (24)
E	201	Mandatory field data missing in <223> in SEQ ID (24)
E	257	Invalid sequence data feature in <221> in SEQ ID (24)
E	257	Invalid sequence data feature in <221> in SEQ ID (25)

Input Set:

Output Set:

Started: 2007-07-05 13:02:56.585
Finished: 2007-07-05 13:03:00.275
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 690 ms
Total Warnings: 55
Total Errors: 37
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code	Error Description
E 257	Invalid sequence data feature in <221> in SEQ ID (25)
E 201	Mandatory field data missing in <223> in SEQ ID (25)
E 257	Invalid sequence data feature in <221> in SEQ ID (26)
E 257	Invalid sequence data feature in <221> in SEQ ID (27)
E 201	Mandatory field data missing in <223> in SEQ ID (27)
E 257	Invalid sequence data feature in <221> in SEQ ID (28)
E 201	Mandatory field data missing in <223> in SEQ ID (28)
E 257	Invalid sequence data feature in <221> in SEQ ID (29)
E 201	Mandatory field data missing in <223> in SEQ ID (29)
E 257	Invalid sequence data feature in <221> in SEQ ID (29)
E 201	Mandatory field data missing in <223> in SEQ ID (29)
E 257	Invalid sequence data feature in <221> in SEQ ID (30)
E 201	Mandatory field data missing in <223> in SEQ ID (30)
E 257	Invalid sequence data feature in <221> in SEQ ID (30) This error has occured more than 20 times, will not be displayed
E 201	Mandatory field data missing in <223> in SEQ ID (30)

SEQUENCE LISTING

<110> THERAPTOSIS S.A.

<120> Peptides having, for example, an antiangiogenic activity and applications thereof in therapeutics

<130> CP/61114-PCT

<140> 10573576
<141> 2007-07-05

<150> FR 02 11 270
<151> 2003-09-25

<160> 30

<170> PatentIn version 3.1

<210> 1
<211> 26
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> either a G or a GG, the amino-terminal end of which is free, alkylated, acylated, or in particular acetylated, or contains a labelling group, such as the biotinyl group.

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> either a C, in which case X in the 2-position = X in the 9-position, the two Cs then being connected by a disulphide bridge, or X in the 2-position is capable of forming a lactam bridge with X in the 4-position, one of X in the 2-position or X in the 9-position being an amino acid bearing an acid group, such as A or D, the other bearing an amino function, such as Q or N.

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> either a C, in which case X in the 2-position = X in the 9-position, the two Cs then being connected by a disulphide bridge, or X in the 2-position is capable of forming a lactam bridge with X in the 9-position, one of X in the 2-position or X in the 9-position being an amino acid bearing an acid group, such as A or D, the other bearing an amino function, such as Q or N.

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> either a C, in which case X in the 2-position = X in the 9-position, the two Cs then being connected by a disulphide bridge, or X in the 2-position is capable of forming a lactam bridge with X in the 4-position, one of X in the 2-position or X in the 9-position being an amino acid bearing an acid group,

such as A or D, the other bearing an amino function, such as Q or N.

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> either an R motif or a K motif.

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> either an R motif or a K motif.

<220>
<221> MISC_FEATURE
<222> (24)..(24)
<223> either an R motif or a K motif.

<220>
<221> MISC_FEATURE
<222> (26)..(26)
<223> is an aliphatic amino acid, the C-terminal end of which is amidated.

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> either an M motif or a norleucine motif.

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> either a motif, or a succession of two di-, tri- or tetrapeptide motifs composed of G or of a combination of G and of S, such as GG, GGG, GGGG, GGS, GGGS or GGSGGS, or else X in the 5-position is a C motif, the side chain of which serves as a point for covalent bonding with a 3-nitro-2-pyridinesulphenyl group, etc.

<400> 1

Xaa Xaa Arg Gly Asp Xaa Phe Gly Xaa Xaa Leu Leu Phe Ile His Phe
1 5 10 15

Xaa Ile Gly Ser Xaa His Ser Xaa Ile Xaa
20 25

<210> 2
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 2

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 3
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 3

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Arg Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 4
<211> 27
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 4

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Phe Ile His
1 5 10 15

Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 5
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 5

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Ser Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 6
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 6

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Lys Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 7
<211> 29
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<220>
<221> MISC_FEATURE
<222> (19)..(19)
<223> NR representing an N-alkylarginine motif

<400> 7

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Asn Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 8
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 8

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Ser Arg
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 9
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 9

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Ser Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 10
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(9)
<223>

<400> 10

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Arg
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 11
<211> 8
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> the RGD motif via a lactam bridge between the amino acids X (X)-C-O-NH-(X'),
X and X' being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> the RGD motif via a lactam bridge between the amino acids X (X)-C-O-NH-(X'),
X and X' being amino acids such that one bears an acid group and the other bears an amine

<400> 11

Xaa Arg Gly Asp Met Phe Gly Xaa
1 5

<210> 12
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 12

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Cys Arg His Ser Arg Ile Gly
    20 25

<210> 13
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 13

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile
1 5 10 15

Phe Phe Arg Ile Gly Cys Arg Phe Ser Arg Ile Gly
    20 25

<210> 14
<211> 28
<212> PRT

<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 14

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 15
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 15

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Arg Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 16
<211> 27
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 16

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Phe Ile His
1 5 10 15

Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 17
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 17

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Ser Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 18
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 18

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Lys Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 19
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (19)..(19)
<223> NR representing an N-alkylarginine motif

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 19

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 20
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 20

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Ser Arg
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 21
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 21

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Ser Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 22
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 22

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Arg
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
20 25

<210> 23

<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X in the 3-position and X in the 10-position being amino acids such that one bears an acid group and the other bears an amine

<400> 23

Gly Gly Xaa Arg Gly Asp Met Phe Gly Xaa Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 24
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<220>
<221> MOD_RES
<222> (28)..(28)
<223> AMIDATION

<400> 24

Gly Gly Cys Arg Ala Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 25
<211> 28
<212> PRT
<213> Human HIV

<220>
<221> MOD_RES
<222> (28)..(28)
<223> AMIDATION

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<400> 25

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly Leu Leu Phe Ile
1 5 10 15

His Phe Ala Ile Gly Ser Arg His Ser Ala Ile Gly
    20 25

<210> 26
<211> 27
<212> PRT
<213> Human HIV

<220>
<221> MOD_RES
<222> (27)..(27)
<223> AMIDATION

<400> 26

Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Gly Leu Leu Phe Ile His
1 5 10 15

Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
    20 25

<210> 27
<211> 16
<212> PRT
<213> Human HIV

<220>
<221> MOD_RES
<222> (16)..(16)
<223>

<400> 27

Leu Leu Phe Ile His Phe Arg Ile Gly Ser Arg His Ser Arg Ile Gly
1 5 10 15

<210> 28
<211> 12
<212> PRT
<213> Human HIV

<220>
<221> MOD_RES
<222> (12)..(12)
<223>

<400> 28

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly
1 5 10

<210> 29
<211> 12
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<220>
<221> MOD_RES
<222> (12)..(12)
<223>

<400> 29

Gly Gly Cys Arg Ala Asp Met Phe Gly Cys Gly Gly
1 5 10

<210> 30
<211> 12
<212> PRT
<213> Human HIV

<220>
<221> DISULPHIDE
<222> (3)..(10)
<223>

<220>
<221> MOD_RES
<222> (12)..(12)
<223>

<400> 30

Gly Gly Cys Arg Gly Asp Met Phe Gly Cys Gly Gly
1 5 10